

NONVOLATILE MEMORY WITH UNDERCUT TRAPPING STRUCTURE

ABSTRACT OF THE DISCLOSURE

The present invention discloses a nonvolatile memory with undercut trapping structure, the nonvolatile memory comprising a semiconductor substrate. A gate oxide is formed on the semiconductor substrate. A gate structure is formed on the gate oxide, wherein the gate structure including a undercut structure formed at lower portion of the gate structure and inwardly into the gate structure. An isolation layer is formed over the sidewall of the gate structure. First spacers are formed on the sidewall of the isolation layer and filled into the undercut structure for storing carrier and source and drain regions formed adjacent to the gate structure and under the undercut structure. Salicide is formed on the gate structure and the source and drain regions.